



NM OIL CONSERVATION
ARTESIA DISTRICT
JUN 13 2017

RECEIVED

March 24, 2017

New Mexico Energy, Minerals and Natural Resources Department
Attn: Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87505

Attn: Jackie Lathan

Re: Mewbourne Oil Company
Derringer 18 B3EH Federal #002H
Russell; Bone Spring
Eddy County, New Mexico
API# 30-015-43578

Enclosed please find the original and one (1) copy of the survey performed on the reference well by STRYKER ENERGY DIRECTIONAL SERVICES, L.L.C. Other information required by your office is as follows:

<u>Name & Title</u>	<u>Drainhole No.</u>	<u>Survey Depths</u>	<u>Dates Performed</u>	<u>Type Survey</u>
Greg Morris	Original Hole	8,277ft. to 13,035ft.	02-26-17 to 03-09-17	MWD Survey

A certified plat on which the bottom-hole location is oriented to both surface location and to the lease lines (or unit lines in case of pooling) is attached to the survey report. If any other information is required, please contact the undersigned at the letterhead address and phone number.


Todd Estes

Enclosures

CC:

Mewbourne Oil Company
Attn: Frosty Lathan
P.O. Box 5720
Hobbs, NM 88241

Mewbourne Oil Company
Attn: Robin Terrell
P.O. Box 5720
Hobbs, NM 88241

NMEMaNRD\Mewbourne Oil Company\Derringer 18 B3EH Federal #2H\M171010

STRYKER ENERGY DIRECTIONAL SERVICES, L.L.C.
P.O. Box 1250
Montgomery, TX 77356
Office (936) 582-7296 * Fax (936)-588-4163



March 24, 2017

Survey Certification Report

STATE OF TEXAS

COUNTY OF Montgomery

I, Todd Estes, certify that I am employed by STRYKER ENERGY DIRECTIONAL SERVICES, L.L.C., and that I did on the day(s) of February 26, 2017, through March 09, 2017 conduct or supervise the taking of a SEDS Original Hole MWD Survey from a depth of 8,277 feet to a depth of 13,035 feet; that I am authorized and qualified to make this report; that this survey was conducted at the request of Mewbourne Oil Company, for the Derringer 18 B3EH Federal #002H well, API # **30-015-43578** in Eddy County, New Mexico; and that I have reviewed this report and find that it conforms to the principles as set forth by STRYKER ENERGY DIRECTIONAL SERVICES, L.L.C.

Todd Estes

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Microsoft
MWD Surveys



Company: Mewbourne Oil Company
Project: Eddy County, New Mexico
Site: Section 18-20S-29E Derringer 18 B3EH Fed 2H
Well: Derringer 18 B3EH Fed 2H
Wellbore: Original Hole
Design: Original Hole

Local Co-ordinate Reference: Well Derringer 18 B3EH Fed 2H
TVD Reference: 3260 + 27 @ 3287.0usft (Patterson 250)
MD Reference: 3260 + 27 @ 3287.0usft (Patterson 250)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Stryker_EDM

Survey Program Date 3/9/2017

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
100.0	8,231.0	Phoenix Tech Gyro Survey (Original Hole)	NSG-CT_WL	Continuous north-seeking gyro on wireline
8,277.0	13,100.0	Stryker MWD Survey (Original Hole)	MWD	MWD v3:standard declination

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)
8,231.0	5.93	200.57	8,225.8	-164.1	-70.2	178.5	203.18
8,277.0	4.70	206.10	8,271.6	-168.0	-71.9	182.7	203.17
8,309.0	5.90	155.90	8,303.5	-170.7	-71.8	185.1	202.82
8,340.0	10.90	137.70	8,334.2	-174.3	-69.2	187.5	201.65
8,371.0	13.20	122.40	8,364.5	-178.3	-64.2	189.6	199.80
8,402.0	15.50	108.80	8,394.5	-181.6	-57.3	190.4	197.51
8,433.0	17.90	95.10	8,424.2	-183.3	-48.6	189.7	194.86
8,464.0	20.40	79.20	8,453.5	-182.7	-38.6	186.8	191.92
8,495.0	24.80	71.70	8,482.2	-179.7	-27.1	181.7	188.57
8,526.0	29.10	68.00	8,509.8	-174.8	-13.9	175.4	184.55
8,558.0	32.90	71.10	8,537.2	-169.1	1.5	169.1	179.48
8,589.0	33.60	72.00	8,563.1	-163.7	17.7	164.7	173.84
8,620.0	35.40	71.90	8,588.7	-158.3	34.3	162.0	167.76
8,651.0	38.10	72.30	8,613.5	-152.6	52.0	161.2	161.18
8,682.0	40.20	71.00	8,637.6	-146.4	70.6	162.5	154.27
8,714.0	40.40	69.30	8,662.0	-139.4	90.0	165.9	147.14
8,745.0	40.50	69.00	8,685.6	-132.2	108.8	171.3	140.54
8,776.0	42.10	69.40	8,708.8	-125.0	128.0	178.9	134.32
8,808.0	44.40	73.00	8,732.2	-117.9	148.7	189.8	128.41
8,839.0	48.30	75.40	8,753.5	-111.8	170.3	203.7	123.29
8,864.0	50.60	77.50	8,769.8	-107.4	188.8	217.2	119.63



Microsoft
MWD Surveys



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Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	Closure Distance (usft)	Closure Azimuth (°)
8,895.0	53.60	78.70	8,788.8	-102.3	212.7	236.0	115.69
8,927.0	56.20	76.20	8,807.2	-96.6	238.2	257.1	112.08
8,958.0	59.20	81.20	8,823.8	-91.5	263.9	279.3	109.13
8,989.0	63.50	80.90	8,838.7	-87.3	290.8	303.6	106.71
9,020.0	67.40	80.50	8,851.6	-82.7	318.6	329.2	104.56
9,051.0	71.20	79.20	8,862.5	-77.6	347.1	355.7	102.60
9,082.0	73.70	78.40	8,871.9	-71.9	376.1	382.9	100.82
9,095.0	75.00	77.60	8,875.4	-69.3	388.4	394.5	100.11
9,168.0	78.20	74.50	8,892.3	-52.2	457.3	460.2	96.51
9,198.7	78.10	76.32	8,898.6	-44.6	486.3	488.4	95.24
LP Derringer 18 B3EH Fed 1H							
9,200.0	78.10	76.40	8,898.9	-44.3	487.6	489.6	95.19
9,231.0	77.60	76.50	8,905.4	-37.2	517.1	518.4	94.11
9,262.0	78.30	76.80	8,911.8	-30.2	546.6	547.4	93.16
9,293.0	79.80	77.10	8,917.7	-23.3	576.2	576.7	92.32
9,324.0	81.90	77.20	8,922.7	-16.5	606.0	606.3	91.56
9,355.0	83.60	77.90	8,926.6	-9.9	636.1	636.1	90.89
9,386.0	85.50	79.80	8,929.5	-3.9	666.3	666.4	90.34
9,418.0	86.90	82.00	8,931.6	1.1	697.9	697.9	89.91
9,449.0	87.30	83.10	8,933.2	5.2	728.6	728.6	89.59
9,480.0	87.30	83.00	8,934.7	8.9	759.3	759.4	89.33
9,573.0	89.50	87.60	8,937.3	16.5	851.9	852.1	88.89
9,666.0	89.90	87.60	8,937.8	20.4	944.8	945.1	88.76
9,760.0	88.80	87.60	8,938.8	24.3	1,038.7	1,039.0	88.66
9,853.0	87.50	87.60	8,941.8	28.2	1,131.6	1,132.0	88.57
9,947.0	87.90	88.50	8,945.6	31.4	1,225.5	1,225.9	88.53
10,040.0	88.50	89.60	8,948.5	33.0	1,318.4	1,318.8	88.57



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10,133.0	88.90	89.90	8,950.6	33.4	1,411.4	1,411.8	88.65
10,227.0	88.70	89.50	8,952.6	33.9	1,505.4	1,505.8	88.71
10,321.0	91.10	89.80	8,952.8	34.4	1,599.4	1,599.7	88.77
10,414.0	91.10	89.20	8,951.0	35.3	1,692.3	1,692.7	88.81
10,508.0	86.60	87.80	8,952.9	37.7	1,786.3	1,786.7	88.79
10,602.0	90.30	87.90	8,955.4	41.2	1,880.2	1,880.6	88.74
10,696.0	90.00	86.90	8,955.2	45.5	1,974.1	1,974.6	88.68
10,789.0	89.70	86.80	8,955.4	50.6	2,066.9	2,067.5	88.60
10,883.0	90.20	86.20	8,955.5	56.4	2,160.7	2,161.5	88.51
10,976.0	90.70	88.80	8,954.8	60.4	2,253.6	2,254.4	88.46
11,070.0	89.30	89.70	8,954.8	61.6	2,347.6	2,348.4	88.50
11,163.0	88.00	89.20	8,956.9	62.5	2,440.6	2,441.4	88.53
11,257.0	88.80	90.60	8,959.6	62.7	2,534.6	2,535.3	88.58
11,350.0	88.30	90.40	8,961.9	61.9	2,627.5	2,628.2	88.65
11,443.0	88.30	89.20	8,964.7	62.2	2,720.5	2,721.2	88.69
11,537.0	87.30	88.00	8,968.3	64.5	2,814.4	2,815.1	88.69
11,630.0	86.90	88.60	8,973.0	67.3	2,907.2	2,908.0	88.67
11,724.0	89.50	90.10	8,975.9	68.3	3,001.2	3,001.9	88.70
11,817.0	90.00	90.10	8,976.4	68.2	3,094.2	3,094.9	88.74
11,911.0	88.90	89.80	8,977.3	68.2	3,188.1	3,188.9	88.77
12,004.0	88.80	90.00	8,979.1	68.4	3,281.1	3,281.8	88.81
12,098.0	88.60	90.20	8,981.3	68.2	3,375.1	3,375.8	88.84
12,191.0	90.60	90.70	8,981.9	67.5	3,468.1	3,468.7	88.88
12,285.0	87.80	90.00	8,983.2	66.9	3,562.1	3,562.7	88.92
12,378.0	88.00	90.20	8,986.6	66.8	3,655.0	3,655.6	88.95
12,472.0	90.90	91.30	8,987.5	65.5	3,749.0	3,749.6	89.00
12,565.0	90.30	90.70	8,986.6	63.9	3,842.0	3,842.5	89.05



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12,659.0	90.50	90.70	8,985.9	62.8	3,936.0	3,936.5	89.09
12,753.0	89.30	90.40	8,986.1	61.9	4,029.9	4,030.4	89.12
12,846.0	88.30	89.80	8,988.0	61.7	4,122.9	4,123.4	89.14
12,940.0	89.20	89.70	8,990.1	62.1	4,216.9	4,217.4	89.16
13,035.0	87.30	89.20	8,993.0	63.0	4,311.8	4,312.3	89.16
13,100.0	87.30	89.20	8,996.0	63.9	4,376.8	4,377.2	89.16

13100' MD Projected to Bit - PBHL Derringer 18 B3EH Fed 1H

Survey Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
13,100.0	8,996.0	63.9	4,376.8	13100' MD Projected to Bit